

295573US0PCT.ST25.txt
SEQUENCE LISTING

<110> Shindo, Kazutoshi
Kagami, Osamu
Misawa, Norihiko
Furukawa, Kensuke

<120> Process for producing picolinic acid compounds

<130> 295573US0PCT

<140> 10/591,603

<141> 2006-09-05

<150> PCT/JP05/02755

<151> 2005-02-22

<150> JP 2004-061238

<151> 2004-03-04

<160> 10

<170> PatentIn version 3.3

<210> 1

<211> 1377

<212> DNA

<213> Artificial

<220>

<223> Synthetic gene

<400> 1

atgagctcag caatcaaaga agtgcaggga gcccctgtga agtgggttac caattggacg	60
ccggaggcga tccgggggtt ggtcgatcag gaaaaagggc tgcttgatcc acgcatactac	120
gccgatcaga gtctttatga gctggagctt gagcgggttt ttggctgctc ttggctgtta	180
cttgggcacg agagtcatgt gcctgaaacc ggggacttcc tggccactta catggcgaa	240
gatccggtgg ttatggtgcg acagaaaagac aagagcatca aggtgttcct taaccagtgc	300
cgacaccgcg gcatgcgtat ctgcccctcg gacgccggca acgccaaggc tttcacctgc	360
agctatcacg gctgggccta cgacatcgcc ggcaagctgg tgaacgtgcc gttcgagaag	420
gaagcctttt gcgacaagaa agaaggcgac tgcggctttg acaaggccga atggggcccg	480
ctccaggcac gcgtggcaac ctacaaggc ctggctttg ccaactggga tgtgcaggcg	540
ccagaattgg agacctacct cggtgacgcc cgccccata tggacgtcat gctggatcgc	600
acgcccggccg ggactgtggc catcgccggc atgcagaagt ggtgattcc gtgcaactgg	660
aagtttgcgg ctgagcagg ctgcagtgac atgtaccacg ccggcaccat gtcgcacctg	720
tccggcatcc tggcgggcat gccgccggaa atggacctgt cgcatgcaca ggtgccacc	780
aaggcaacc agttccgggc cggctgggc gggcacggct cgggctggtt cgtcgacgag	840
ccggccatgc tcatggcggt gatggggccc aaggtcacccc agtactggac cgaaggcccg	900

295573US0PCT.ST25.txt

gctgccgacc	tggcagaaca	gcgactgggc	cacaccatgc	cggttcgacg	catgttcggc	960
cagcacatga	cgatcttccc	gacctgttca	ttcctgcccc	ccatcaacac	catccggacc	1020
tggcacccgc	gtggtcccaa	tgaaatcgag	gtgtgggcct	tcaccctggt	cgatgccac	1080
gccccggcgg	agatcaagga	agaatatcgc	cggcacaaca	tccgcacctt	ctccgcaggc	1140
ggcgtgtttg	agcaggacga	tggcgagaac	tgggtggaga	tccagaaggg	gctacgtggg	1200
tacaaggcca	agagccagcc	gctcaatgcc	cagatgggcc	tgggtcggtc	gcagaccggt	1260
caccctgatt	ttcctggcaa	cgtcggtac	gtctacgccc	aagaagcggc	gcggggatag	1320
tatcaccact	ggatgcgcat	gatgtccgag	cccagctggg	ccacgctcaa	gccctga	1377

<210> 2
<211> 458
<212> PRT
<213> Artificial

<220>
<223> Synthetic polypeptide

<400> 2

Met	Ser	Ser	Ala	Ile	Lys	Glu	Val	Gln	Gly	Ala	Pro	Val	Lys	Trp	Val
1					5			10					15		
Thr	Asn	Trp	Thr	Pro	Glu	Ala	Ile	Arg	Gly	Leu	Val	Asp	Gln	Glu	Lys
		20						25					30		
Gly	Leu	Leu	Asp	Pro	Arg	Ile	Tyr	Ala	Asp	Gln	Ser	Leu	Tyr	Glu	Leu
	35					40				45					
Glu	Leu	Glu	Arg	Val	Phe	Gly	Arg	Ser	Trp	Leu	Leu	Gly	His	Glu	
	50				55					60					
Ser	His	Val	Pro	Glu	Thr	Gly	Asp	Phe	Leu	Ala	Thr	Tyr	Met	Gly	Glu
	65				70				75				80		
Asp	Pro	Val	Val	Met	Val	Arg	Gln	Lys	Asp	Lys	Ser	Ile	Lys	Val	Phe
				85				90					95		
Leu	Asn	Gln	Cys	Arg	His	Arg	Gly	Met	Arg	Ile	Cys	Arg	Ser	Asp	Ala
		100					105					110			
Gly	Asn	Ala	Lys	Ala	Phe	Thr	Cys	Ser	Tyr	His	Gly	Trp	Ala	Tyr	Asp
		115				120					125				
Ile	Ala	Gly	Lys	Leu	Val	Asn	Val	Pro	Phe	Glu	Lys	Glu	Ala	Phe	Cys
		130				135				140					

295573US0PCT.ST25.txt

Asp Lys Lys Glu Gly Asp Cys Gly Phe Asp Lys Ala Glu Trp Gly Pro
145 150 155 160

Leu Gln Ala Arg Val Ala Thr Tyr Lys Gly Leu Val Phe Ala Asn Trp
165 170 175

Asp Val Gln Ala Pro Glu Leu Glu Thr Tyr Leu Gly Asp Ala Arg Pro
180 185 190

Tyr Met Asp Val Met Leu Asp Arg Thr Pro Ala Gly Thr Val Ala Ile
195 200 205

Gly Gly Met Gln Lys Trp Val Ile Pro Cys Asn Trp Lys Phe Ala Ala
210 215 220

Glu Gln Phe Cys Ser Asp Met Tyr His Ala Gly Thr Met Ser His Leu
225 230 235 240

Ser Gly Ile Leu Ala Gly Met Pro Pro Glu Met Asp Leu Ser His Ala
245 250 255

Gln Val Pro Thr Lys Gly Asn Gln Phe Arg Ala Gly Trp Gly Gly His
260 265 270

Gly Ser Gly Trp Phe Val Asp Glu Pro Gly Met Leu Met Ala Val Met
275 280 285

Gly Pro Lys Val Thr Gln Tyr Trp Thr Glu Gly Pro Ala Ala Asp Leu
290 295 300

Ala Glu Gln Arg Leu Gly His Thr Met Pro Val Arg Arg Met Phe Gly
305 310 315 320

Gln His Met Thr Ile Phe Pro Thr Cys Ser Phe Leu Pro Ala Ile Asn
325 330 335

Thr Ile Arg Thr Trp His Pro Arg Gly Pro Asn Glu Ile Glu Val Trp
340 345 350

Ala Phe Thr Leu Val Asp Ala Asp Ala Pro Ala Glu Ile Lys Glu Glu
355 360 365

Tyr Arg Arg His Asn Ile Arg Thr Phe Ser Ala Gly Gly Val Phe Glu
370 375 380

Gln Asp Asp Gly Glu Asn Trp Val Glu Ile Gln Lys Gly Leu Arg Gly
385 390 395 400

295573US0PCT.ST25.txt

Tyr Lys Ala Lys Ser Gln Pro Leu Asn Ala Gln Met Gly Leu Gly Arg
405 410 415

Ser Gln Thr Gly His Pro Asp Phe Pro Gly Asn Val Gly Tyr Val Tyr
420 425 430

Ala Glu Glu Ala Ala Arg Gly Met Tyr His His Trp Met Arg Met Met
435 440 445

Ser Glu Pro Ser Trp Ala Thr Leu Lys Pro
450 455

<210> 3
<211> 35
<212> DNA
<213> Artificial

<220>
<223> Synthetid oligonucleotide

<400> 3
ccgaattcaa ggagacgttg aatcatgagc tcagc 35

<210> 4
<211> 25
<212> DNA
<213> Artificial

<220>
<223> Synthetid oligonucleotide

<400> 4
ttgaattctt ccggttgaca gatct 25

<210> 5
<211> 12
<212> PRT
<213> Artificial

<220>
<223> Synthetid peptide

<400> 5

Asp Lys Ser Ile Lys Val Phe Leu Asn Gln Cys Arg
1 5 10

<210> 6
<211> 12
<212> PRT
<213> Artificial

<220>
<223> Synthetid peptide

295573USOPCT.ST25.txt

<400> 6

Asp Asp Gly Glu Asn Trp Val Glu Ile Gln Lys Gly
1 5 10

<210> 7

<211> 38

<212> DNA

<213> Artificial

<220>

<223> Synthetid oligonucleotide

<220>

<221> misc_feature

<222> (24)..(24)

<223> N = A, C, G, or T

<220>

<221> misc_feature

<222> (36)..(36)

<223> N = A, C, G, or T

<400> 7

gacaagagca tcaagggttt cctnaaccag tgycgnca

38

<210> 8

<211> 36

<212> DNA

<213> Artificial

<220>

<223> Synthetid oligonucleotide

<220>

<221> misc_feature

<222> (28)..(28)

<223> N = A, C, G, or T

<400> 8

cccttctgg atctccaccc agttytcncc rtcgtc

36

<210> 9

<211> 20

<212> DNA

<213> Artificial

<220>

<223> Synthetid oligonucleotide

<400> 9

aacacccatgaa tgctcttgta

20

<210> 10

<211> 20

<212> DNA

<213> Artificial

295573US0PCT.ST25.txt

<220>
<223> Synthetid oligonucleotide

<400> 10
gggtggagat ccagaagggg

20